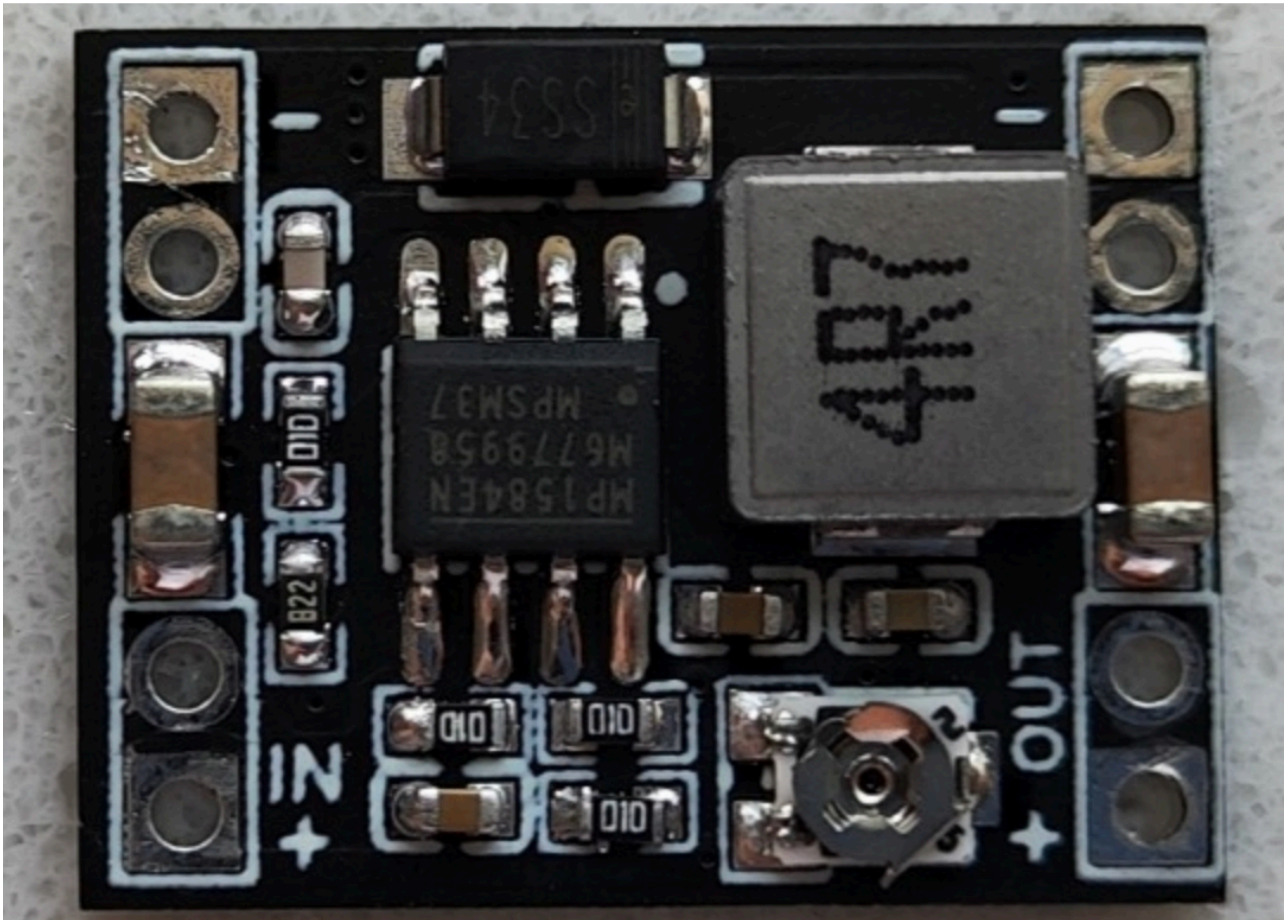


MP1584EN PSU

Sonntag, 22. Dezember 2024

12:03

https://www.pcbway.com/project/shareproject/MP1584EN_adjustable_step_down_module_778388c9.html?utm_source=chatgpt.com



MP1584EN adjustable step down module

The MP1584EN is a high frequency step-down switching regulator with an integrated internal high-side high-voltage power MOSFET. It provides a 3A output with current mode control for fast loop response and easy compensation.

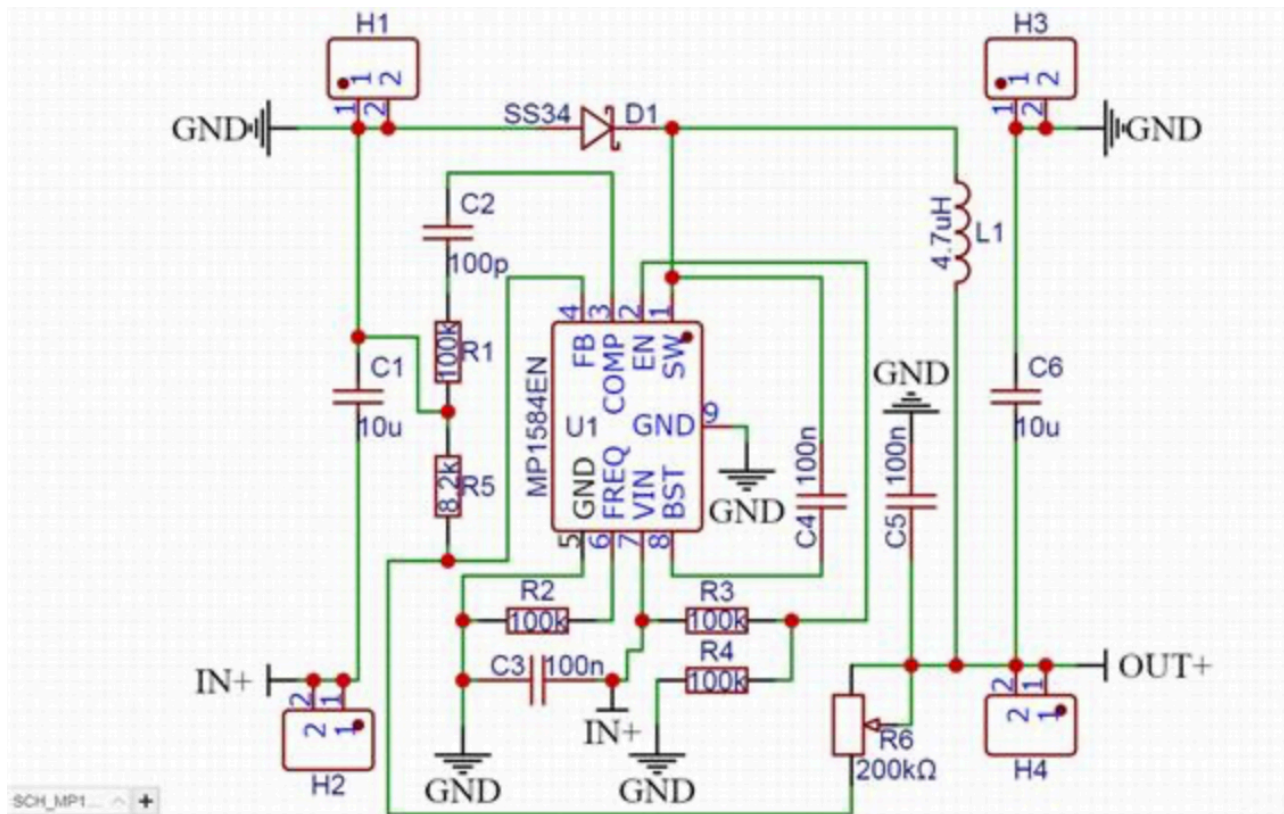
The wide 4.5V to 28V input range is suitable for a variety of step-down applications, including those in the automotive input environment. 100uA operating quiescent current allows use in battery powered applications.

High power conversion efficiency is achieved over a wide load range by scaling down the switching frequency at light loads to reduce switching and

scaling down the switching frequency at light loads to reduce switching and gate drive losses.

Frequency Foldback Helps Prevent Inductor Current Runaway During Startup and Thermal Shutdown

By switching at 1.5MHz, the MP1584 is able to prevent EMI (electromagnetic interference) noise problems such as those found in AM radio and ADSL applications.



Input Voltage: 4.5V~28V

Output Voltage: 0.8V~20V

Output Current: 3A(Max)

Conversion Efficiency: 96%(Max)

Output Ripple: <30mV

Switching Frequency: 1.5MHz(Max), Typical 1MHz

Operating Temperature: - 45℃~+85℃

Dimensions: 21mm * 16mm (L*W)

